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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/857,288	10/01/2001	Christer Landberg	53863-64312	9688
466	7590	12/13/2004	EXAMINER	
YOUNG & THOMPSON 745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202			LEE, CHI HO A	
			ART UNIT	PAPER NUMBER
			2663	

DATE MAILED: 12/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/857,288

Applicant(s)

LANDBERG ET AL.

Examiner

Andrew Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 06/01/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 3 is objected to because of the following informalities:

“the frame length” should be – a frame length -. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. Claims 1-4, 6-14, 16-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re Claim 1 recites “essentially to the times in terms of time slots”. It should be deleted because it is unclear whether “time slot” are used to for the scheduling interval.

Same reasoning for Claims 6, 14, 16, 17

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 5-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Shaffer et al U.S. Patent Number 5,960,001.

Re Claims 1, 6, fig. 2 teaches plurality of network devices 106, 108 coupled to the Network Controller 101 (central node) over 102 (a shared medium). Network Controller /Reservation Server (scheduler) receives voice or data requests (delay sensitive and non-sensitive traffic) from the network devices and allocates time slots, wherein the time slots are inherently allocated based on availability (issuing a permit). When the network device requests a voice channel (delay sensitive traffic service) of 64 Kbps, the Network Controller allocates a predetermined number of time slots (scheduling interval) by knowing the required handling delay to build the data into the frame (assembling a data packet) and allocating the assigned time slots to be sent every 100 msec (elapsed time/a future time slots) (See fig. 1A & col. 3, lines 55 + col. 6, lines 1-32).

Re Claim 2, refer to Claim 1, wherein the Ethernet Frame has a predetermined frame length (a frame length of the traffic service).

Re Claims 3, 5, refer to Claim 1, See fig. 1B, wherein the data messages (non-delay sensitive data) are allocated in free time slots after the reserved time slot of the voice channel and within every T period (indicates that no scheduling interval has elapsed).

Re Claims 7, 8, 10, refer to Claim 2, wherein the predetermined Ethernet Frame has 800 bytes corresponding to Markers X, Y number of time slots (a plurality of storage cells) (See fig. 1a, 1b) for the voice/data channel in the shared medium.

Re Claim 9, refer to Claim 6, wherein the time slots are accessed cyclically in each T (See fig. 1a).

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Re Claim 11, wherein each network devices includes both a ISOCHRO and NON-ISCHR controllers (scheduling means comprises several cyclical schedulers) for controlling different traffic services for allocating slots with the T of fig. 2b (same scheduling terminal) (See col. 5, lines 53 +).

Re Claim 12, wherein the Markers X, Y correspond to the number of time slots (has a length in cells) with interval T (the scheduling interval).

Re Claim 13, the Network Controller 101 inherently has queues (queue recording means) for storing frames (packet queue size) non-delay sensitive data traffic awaiting transmission.

Re Claims 14, 16, 17 refer to Claims 2, 7 13, wherein the Ethernet Frame has information payload and each network node has a reservation chart (consulting the cells of the scheduling means).

Re Claims 15, 18, 19, 20, refer to Claim 13, 16, wherein within each T, the same number of time slots are allocated with markers X and Y (See fig. 1b) relating to voice and data channels.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer et al U.S. Patent Number 5,960,001.

Re Claim 4, refer to Claim 3, See fig. 1B, within each interval the voice data traffic is allocated first and then the data traffic. Shaffer fails to explicitly teach allocating with "alternating priority". However, one skilled in the art knows the voice traffic is delay sensitive has higher priority over non-sensitive data traffic. Hence, one skilled in the art would have been motivated to assign higher priority traffic first to maintain to quality of the voice channel (scheduled traffic services with alternating priority). Therefore, it would have been obvious to one ordinary skilled to locate lower priority non-delay sensitive data traffic to available time slot after higher priority traffic is allocated in the same transmission interval.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Lee whose telephone number is 571-272-3130. The examiner can normally be reached on Monday to Friday from 8:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571-571-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AL

12/05/04

ANDY LEE
PATENT EXAMINER